REMARKS

Claims 1-9, 11-16 and 19-23 are currently pending in the subject application and are presently under consideration.

Favorable reconsideration of the subject patent application is respectfully requested in view of the comments and amendments herein.

I. Rejection of Claims 1-9, 11-16 and 19-23 Under 35 U.S.C. §101

Claims 1-9, 11-16 and 19-23 stand rejected under 35 U.S.C. §101 because the Examiner contends that the claimed invention is directed to non-statutory subject matter. It is respectfully submitted that this rejection should be withdrawn for at least the following reasons. Contrary to the Examiner's assertions, the subject claims do produce a useful, tangible, and concrete final result.

> Because the claimed process applies the Boolean principle [abstract idea] ***to produce a useful, concrete, tangible result*** … on its face the claimed process comfortably falls within the scope of §101. *AT&T Corp. v. Excel Communications, Inc.*, 172 F.3d 1352, 1358. (Fed. Cir. 1999) (Emphasis added); *See State Street Bank & Trust Co. v. Signature Fin. Group, Inc.*, 149 F.3d 1368, 1373, 47 USPQ2d 1596, 1601 (Fed.Cir.1998). The inquiry into patentability requires an examination of the contested claims to see if the claimed subject matter, as a whole, is a disembodied mathematical concept representing nothing more than a "law of nature" or an "abstract idea," or if the mathematical concept has been ***reduced to some practical application rendering it "useful."*** *AT&T* at 1357 *citing In re Alappat*, 33 F.3d 1526, 31 1544, 31 U.S.P.Q.2D (BNA) 1545, 1557 (Fed. Cir. 1994) (emphasis added).

As provided above, the legal standard set forth by the Federal Circuit in *AT&T Corp. v. Excel Communication, Inc.* for determining whether a claim is directed toward statutory subject matter is whether a claim can be applied in a practical application to produce a useful, concrete, and tangible result. The present claims relate to *efficiently scoring splits in a decision tree in order to evaluate a model's performance*. It is apparent from the most recent Office Action that the Examiner acknowledges the usefulness and utility of decision trees. It should therefore also be acknowledged that a system and method for *more efficient computation of scores for decision tree splits* represents a useful, concrete, and tangible result. Such a system or method can, for

example, reduce the computation load on a processor utilized by a decision tree learning system, and the utility of such a result would be readily recognizable by one of ordinary skill in the art. The Examiner contends that decision tree learning does not constitute a practical application, but goes on to state that decision tree learning can be employed for practical application. It is submitted that, given the acknowledged utility of decision tree learning in a wide variety of useful applications, an invention that provides a more efficient means for scoring decision tree splits during decision tree learning does indeed produce a useful result.

Based on the most recent Office Action and previous telephonic discussions, the Examiner ostensibly seeks to limit the subject claims to one specific area of application to which decision trees can be applied (*e.g.* economic analysis, data mining for analysis of consumer purchases, *etc.*). It is submitted that restricting the present invention to generation of decision trees applied toward only *one* specific field of application is both unduly limiting and an unnecessary condition for compliance under 35 U.S.C. §101. It is only necessary to affirm the invention's utility in efficient decision tree learning, which is a practical and useful application given the acknowledged practical utility of decision tree learning.

The Examiner also argues that the present claims preempt a wide variety of decision tree learning, and even goes so far as to suggest that the claims attempt to effectively patent every substantial practical application of decision tree learning. This is manifestly not the case. A system or method that facilitates decision tree learning would only be preempted by the present claims if such system or method utilized the unique features disclosed in the subject claims, several of which features were discussed during the most recent interview and were acknowledged by the Examiner to overcome the present art of record. It is respectfully submitted that claims deemed sufficiently narrow to overcome the most pertinent art of record cannot also be said to "preempt a wide variety of decision tree learning."

In view of at least the foregoing, it is readily apparent that applicant's invention as recited in independent claims 1, 11, 14, and 21 (and all claims depending there from) is statutory subject matter and produces a useful, concrete, and tangible result. It is therefore respectfully requested that this rejection be withdrawn.

CONCLUSION

The present application is believed to be in condition for allowance in view of the above comments and amendments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063 [MSFTP485US].

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicants' undersigned representative at the telephone number below.

Respectfully submitted,

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